



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,703	06/29/2001	Reizo Maeda	010829	4945

38834 7590 09/26/2005

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP  
1250 CONNECTICUT AVENUE, NW  
SUITE 700  
WASHINGTON, DC 20036

EXAMINER

ALEJANDRO, RAYMOND

ART UNIT PAPER NUMBER

1745

DATE MAILED: 09/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

09/893,703

Applicant(s)

MAEDA ET AL.

Examiner

Raymond Alejandro

Art Unit

1745

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 14 September 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

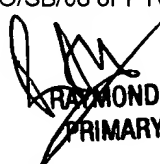
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☒ Applicant's reply has overcome the following rejection(s): the 35 USC 112, 1<sup>st</sup> paragraph rejection has been overcome.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 1-5 and 9.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: see next sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

  
**RAYMOND ALEJANDRO**  
**PRIMARY EXAMINER**

Raymond Alejandro  
Primary Examiner  
Art Unit: 1745

***Response to Arguments***

1. Applicant's arguments filed on 09/14/05 have been fully considered but they are still unpersuasive.
2. The main contention of applicant's arguments is still grounded on substantially the same previously argued assertions. For instance, the inapplicability of Yuasa et al's teachings in column 14, lines 26-30 to their very same Example 7; and the recognition (*and/or non-recognition as contended by the examiner*) that polyethylene could never be confused as an aqueous polymer.
3. In this matter, it is contended that both assertions are still insufficient to overcome the art rejections. With respect to the first assertion (*i.e. Yuasa et al's teachings and Example 7*), the examiner simply asserts that applicant's characterization of what is applicable and/or is not applicable is baseless and without foundation. Thus, the position assumed by the applicant is incorrect and misleading; and certainly, respectfully disagreed with by the examiner. All in all, **Example 7** shows a hydrogen absorbing alloy negative electrode coated with polyethylene (Refer to **EXAMPLE 7**); and Yuasa et al disclose in column 14, lines 26-30 that "*polyethylene used herein may be replaced by one of thermoplastic resins such as, inter alia, ABS resin*". It is noted that ABS resin stands for acrylonitrile-butadiene-styrene copolymer which is one of the polymeric materials employed by the claimed invention.

65

**EXAMPLE 7**

A hydrogen absorbing alloy negative electrode coated with polyethylene as a hydrophobic resin was prepared.

25 because FEP was fixed firmly to the surface of the negative electrode by polyethylene. Polyethylene used herein may be replaced by one of thermoplastic resins, such as polypropylene, poly(vinyl chloride), ABS resin and polystyrene, having a melting point lower than that  
30 of FEP. In the case where polyethylene was replaced

Art Unit: 1745

Therefore, the prior art of record does teach, disclose or reveal a coating material of an aqueous polymeric material not including a fluorocarbon resin as instantly claimed (←*emphasis added*).

Now, turning to applicant's position that "*this statement does not apply to Example 7*", the examiner would like to know why it does not apply to Example 7, that is to say, what objective/scientific/sound evidence is being presented and/or can be presented to elucidate this issue. So far, applicant has only presented a personal belief about how the Yuasa et al reference should be better (conveniently) interpreted. Applicant is reminded that a reference is good for all of its teachings and that, in this case, the test is what the combined teachings of the reference would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

4. In response to applicant's assertion about polyethylene not being an aqueous polymer, the burden is thus shifted to applicants to submit objective evidence demonstrating so. Accordingly, the examiner also asserts that it is not enough that applicant's representative personally believes that. That is to say, the arguments of counsel cannot take the place of evidence in the record. An assertion of what seems to follow from common experience is just attorney argument and not the kind of factual evidence that is required to rebut a prima facie case of inherent anticipation/obviousness (See *MPEP 716.01 and 2145: Consideration of Applicant's Rebuttal Arguments*).

5. With respect to the 35 USC 103 rejection and the argument that "*Kinoshita et al does not teach the aqueous resin "coating" electrode...Rather, the styrene-butadiene resin is part of the electrode*" and its implication, applicant is reminded that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary

Art Unit: 1745

reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

6. As far as the 35 USC 112-2<sup>nd</sup> paragraph rejection, the examiner herein maintains his disagreement with applicant's position for the same reasons expressed in item 3-5 of the final office action dated 06/28/05. Accordingly, the examiner still insists that the exclusionary proviso or negative limitation/clause does not positively include what the inventors invented. It does not point out what the inventors have invented. The examiner likes to clarify that he is not questioning the appropriateness or validity of reciting "negative limitations" as apparently argued by the applicants, in fact, the examiner is well aware of the stipulations in *MPEP 2173.05(i) Negative Limitations*. However, the examiner verily believes that applicant is trying to claim an all-encompassing and all-inclusive numbers of non-fluorocarbon aqueous polymeric materials. To be exact, applicant is attempting to claim not only the specific polymer materials disclosed in his specification but also **all** non-fluorocarbon aqueous polymeric materials. For this reason, the resulting claims do not clearly set forth the metes and bounds of the patent protection desired.

7. As a final matter, given that the 35 USC 112-1<sup>st</sup> paragraph rejection was satisfactorily addressed and overcome by the applicants, the examiner needs not to address the impropriety of finality of the office action because all other pending rejections or issues which are still unresolved were properly and timely raised by the examiner during the present prosecution. As a

Art Unit: 1745

consequence, the request for withdrawal of finality of office action has been considered but dismissed.

*The following responses to applicant's arguments were presented in a previous office action and are presented hereinbelow one more time for the reasons of record:*

8. Even though applicant has argued now that the transitional phrase “*composed of*” is to be construed as closed-ended phrase and therefore does exclude other components; that is, it is meant to be interpreted in the same manner as either “consisting of” or “consisting essentially of” (See amendment of 05/24/05 at page 4, last two paragraphs), the examiner likes to contend that such transitional phrase only applies to the binder material (only one polymeric material). Therefore, the examiner strenuously asserted that the 35 USC 102 anticipatory rejection is still applicable because **Example 1** shows the use of an aqueous solution of poly(vinyl alcohol) (the binding agent) mixed into the hydrogen absorbing alloy powder to form paste; and a foamed nickel porous matrix (the current collector) which is filled with the prepared paste and pressed (EXAMPLE 1/COL 4, lines 1-10). **Example 7** further shows the hydrogen absorbing alloy negative electrode is **coated with polyethylene** (the coating polymeric material) (EXAMPLE 7/COL 4, lines 65-68). Thus, in this case, the hydrogen absorbing alloy electrode consists of the hydrogen absorbing powder and a binding agent composed of a polymeric material (polyvinyl alcohol) adhered to the current collector, and being coated with polyethylene. Hence, the polymeric material in the coating layer is different from the polymeric material in the binding agent. Thus, the prior art of record still provides the necessary structural interrelationship to meet the claimed requirement of having an electrode consisting of hydrogen absorbing alloy powder

Art Unit: 1745

and a binding agent composed of a polymeric material adhered to a current collector and having thereon a coating layer comprising an aqueous polymeric material not including a fluorocarbon resin.

9. With respect to applicant's argument concerning that *"the term 'aqueous' is understood to mean 'more aqueous than non-aqueous...the degree of aqueousness, i.e. more than 50 %'"*, it is noted that such term "aqueous" is a relative term which is not specifically defined by the claim, and the specification does not provide a standard for ascertaining or supporting applicant's characterization thereof. Thus, absent further specific definition (in the specification as filed) of the term "aqueous", the examiner respectfully submits that it is fairly reasonable to set forth that the polymer material of the prior art satisfies the unspecified degree of aqueousness.

10. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., *the term "aqueous" is understood to mean "more aqueous than non-aqueous...the degree of aqueousness, i.e. more than 50 %"*) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Therefore, applicant's argument is not commensurate in scope with the specifically claimed invention.

11. Furthermore, in response to applicant's arguments that *"the Examiner is apparently interpreting the phrase of claim 1, 'an aqueous polymeric material except fluorocarbon resin is applied thereon' as meaning that at least one component of the coating does not include fluorocarbon resin"*, the examiner merely asserts that even assuming arguendo that such applicant's characterization of the examiner's interpretation is correct, the prior art of record still

Art Unit: 1745

clearly uses polyethylene as the electrode coating material (See Yuasa et al'369: EXAMPLE 7 at COL 4, lines 65-68 ); and to the best of the examiner's knowledge the polyethylene material is not a fluorocarbon resin. Additionally, even though its degree of being "*an aqueous polymeric material*" has been questioned by applicants, the fact is that: a) applicant's arguments stating that the FEP is not an aqueous polymeric material because it is a hydrophobic resin is yet insufficient as the present claim language also fails to fairly stipulate the degree of being aqueous. That is, under a broadest reasonable claim interpretation and in the absence of a specific degree of hydrophobicity or hydrophilicity and/or water-repellency in the specification to ascertain such requisite degree, it is believed that the prior art still provides the necessary structural and functional interrelationship of including a polymeric material not including a fluorocarbon resin per se.

12. Applicant's assertion that "*Kinoshita et al does not teach the aqueous resin coating the electrode*" because "*the styrene-butadiene resin is part of the electrode, and is actually the binder*" is still insufficient to overcome the 103 USC 103 rejection. In this respect, applicant's attention is politely directed to the following teachings of Kinoshita et al:

[57]

**ABSTRACT**

A hydrogen storage alloy electrode comprising, an electrically conductive support made of a punched or perforated metal sheet, a mixture supported on said conductive support

a mixture supported on the electrically conductive support, and

said mixture including;

a hydrogen storage alloy powder,

a styrene-butadiene copolymer having a styrene to butadiene weight ratio in a range of 100:30 to 100:100, as a binder,

10



Art Unit: 1745


5 An electrode is configured by coating the punched or perforated metal sheet having the abovementioned regular perforation pattern with a mixture composed mainly of the hydrogen storage alloy powder. The electrode thus obtained

As expressly seen above and consistent with Kinoshita et al's teaching, the mixture including the hydrogen storage alloy powder and the styrene-butadiene copolymer is supported on the conductive support by directly coating said mixture containing the non-fluorocarbon resin on the electrode support. Therefore, it is asserted that Kinoshita et al clearly shows forming a layer comprising the claimed polymer material on the electrode substrate regardless its adhering degree. As a result, the prior art coating layer is a structural equivalent of the corresponding element/feature claimed in the instant invention. Moreover, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art (**←emphasis added**). See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

13. With reference to the 35 USC 112, 2<sup>nd</sup> paragraph rejection, the examiner likes to clarify his position concerning the recitation of the negative limitation "*not including a fluorocarbon resin*". In no way it was intended to stipulate that such negative limitation fails to comply with written description requirement of not describing the subject matter in such a way as to reasonable convey to one skilled in the relevant art that the inventor had possession of the claimed invention as apparently understood by the applicants. The examiner simply wanted to address the issue that the current claims tend to define the invention in terms of what it is not, rather than pointing out the invention. For that reason, the examiner now believes that the 35

Art Unit: 1745

USC 112, 1<sup>st</sup> paragraph rejection (scope of enablement) better reflects the lack of clarity and uncertainty raised by such negative clause of claiming an all-embracing limitation and wide number of compounds without even enable to make or use the large number of non-fluorocarbon polymer resins.



RAYMOND ALEJANDRO  
PRIMARY EXAMINER